

v1. H

PCT/DK99/00401

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

## PCT

### NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C. 20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 20 March 2000 (20.03.00)	<b>Applicant's or agent's file reference</b> 19803003PCT
<b>International application No.</b> PCT/DK99/00401	<b>Priority date</b> (day/month/year) 14 July 1998 (14.07.98)
<b>International filing date</b> (day/month/year) 13 July 1999 (13.07.99)	
<b>Applicant</b> SØRENSEN, Elmgaard, Birger	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:  
11 February 2000 (11.02.00)

in a notice effecting later election filed with the International Bureau on:  
\_\_\_\_\_

2. The election  was  
 was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<b>Authorized officer</b>  Aino Metcalfe
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

**NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES**

(PCT Rule 47.1(c), first sentence)

To:  
HOLME PATENT A/S  
Vesterbrogade 20  
DK-1620 Copenhagen V  
DANEMARK  
*received  
- 4 FEB. 2000  
Holme Patent*

Date of mailing (day/month/year) 27 January 2000 (27.01.00)		<b>IMPORTANT NOTICE</b>	
Applicant's or agent's file reference 19803003PCT			
International application No. PCT/DK99/00401	International filing date (day/month/year) 13 July 1999 (13.07.99)	Priority date (day/month/year) 14 July 1998 (14.07.98)	
Applicant M & J FIBRETECH A/S et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
**AU,CN,EP,IL,JP,KP,KR,US**

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:  
**AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CU,CZ,DE,DK,EA,EE,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,UA,UG,UZ,VN,YU,ZA,ZW**  
The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 27 January 2000 (27.01.00) under No. WO 00/04232

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer  J. Zahra  Telephone No. (41-22) 338.83.38
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International application No.  
PCT/DK 99/00401

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC6: D21H 27/00, D04H 1/72  
According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC6: B27N, D01G, D04H, D21H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 8703626 A1 (SUNDS DEFIBRATOR AKTIEBOLAG), 18 June 1987 (18.06.87), page 4, figure 2 --	1-10
A	WO 9105109 A1 (AHLSTRAND, OVE), 18 April 1991 (18.04.91), claim 1, abstract --	1-10
A	US 4494278 A (KARL K.K. KROYER ET AL), 22 January 1985 (22.01.85), column 3, line 61 - column 4, line 2, fig 1 and 4 --	1-10
A	US 3581706 A (TORBEN BORUP RASMUSSEN), 1 June 1971 (01.06.71), column 3, line 16 - column 4, line 4 -- -----	1-10

Further documents are listed in the continuation of Box C.       See patent family annex.

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>
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Date of the actual completion of the international search  
**3 November 1999**

Date of mailing of the international search report  
**11 -11- 1999**

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. +46 8 666 02 86

Authorized officer  
**Barbro Nilsson/EÖ**  
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT  
Information on patent family members

28/09/99

International application No.  
PCT/DK 99/00401

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 8703626 A1	18/06/87	AT 65269 T	15/08/91
		AU 592609 B	18/01/90
		AU 6726787 A	30/06/87
		CA 1291357 A	29/10/91
		EP 0287566 A,B	26/10/88
		FI 88179 B	31/12/92
		FI 882814 A	13/06/88
		JP 7026255 B	22/03/95
		JP 63502676 T	06/10/88
		NZ 218562 A	30/03/88
		SE 457644 B,C	16/01/89
		SE 8505918 A	14/06/87
		US 4921650 A	01/05/90
WO 9105109 A1	18/04/91	AU 6506090 A	28/04/91
		SE 464475 B,C	29/04/91
		SE 8903189 A	29/03/91
US 4494278 A	22/01/85	AU 534914 B	23/02/84
		AU 4141278 A	17/05/79
		BE 871844 A	01/03/79
		CA 1104786 A	14/07/81
		DE 2848459 A,C	07/06/79
		DK 495677 A	09/05/79
		ES 474880 A	01/04/79
		FI 62386 B,C	31/08/82
		FI 783407 A	09/05/79
		FR 2407992 A,B	01/06/79
		GB 2008638 A,B	06/06/79
		IE 47578 B	02/05/84
		IT 1100937 B	28/09/85
		IT 7829568 D	00/00/00
		JP 1353136 C	11/12/86
		JP 54077770 A	21/06/79
		JP 61020651 B	23/05/86
		LU 80484 A	22/03/79
		NL 187128 B,C	02/01/91
		NL 7811020 A	10/05/79
		NZ 188848 A	16/03/82
SE 430177 B,C	24/10/83		
SE 7811497 A	08/05/79		
ZA 7806209 A	31/10/79		

# INTERNATIONAL SEARCH REPORT

Information on patent family members

28/09/99

International application No.

PCT/DK 99/00401

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3581706 A	01/06/71	BE 723860 A	16/04/69
		DE 1807411 A,B	15/01/70
		DK 147542 B,C	24/09/84
		DK 321578 A	18/07/78
		ES 360148 A	01/07/70
		FI 48614 B	31/07/74
		FR 1592252 A	11/05/70
		GB 1207556 A	07/10/70
		JP 54031522 B	08/10/79
		NL 173191 B,C	18/07/83
		NL 6816053 A	19/05/69
		NL 7800367 A	28/04/78
		SE 339994 B	01/11/71

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PATENT COOPERATION TREATY

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REC'D 24 OCT 2000

WIPO

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

15

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 19803003PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DK99/00401	International filing date (day/month/year) 13/07/1999	Priority date (day/month/year) 14/07/1998
International Patent Classification (IPC) or national classification and IPC D21H27/00		
Applicant M&J FIBRETECH A/S et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
  - This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 12 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 11/02/2000	Date of completion of this report 18.10.00
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Maremonti, M Telephone No. +49 89 2399 8440 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/DK99/00401

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

**Description, pages:**

1-10 as received on 18/07/2000 with letter of 14/07/2000

**Claims, No.:**

1-10 as received on 18/07/2000 with letter of 14/07/2000

**Drawings, sheets:**

1/1 as published

2. The amendments have resulted in the cancellation of:

- the description, pages:  
 the claims, Nos.:  
 the drawings, sheets:

3.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**see separate sheet**

4. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims 1-10
	No: Claims
Inventive step (IS)	Yes: Claims
	No: Claims 1-10
Industrial applicability (IA)	Yes: Claims 1-10
	No: Claims

2. Citations and explanations

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**



**Re Item I**

**Basis of the report**

1. The description of the present application was completely reworded by introducing several replacement terms, expressions and statements that were not present in the application, as originally filed. These amendments introduce, therefore, subject-matter that extends beyond the content of the application, as originally filed, contrary to the provisions of Article 34(2)b) PCT. As an example, the term "well-defibrated" was replaced throughout the description by the term "well-opened", which is not regarded as to be equivalent for a person skilled in the art. Additionally, as far as the citation of document WO 8703626 A1 is concerned, only the statements introduced on page 3, lines 9-15, are admissible as factual citation of the prior art. All other comments introduced from page 3, line 17 to page 4, line 16 cannot be admitted.

All amendments to the description but the above mentioned factual prior art citation were, hence, ignored in the establishment of the present examination report (Rule 70(2)c) PCT).

As far as the new set of claims is concerned, the term "well-opened" was introduced in claims 1, 2 and 4 to replace either the term "well-dissected" or the term "well-defibrated". Moreover, the term "nits-opener" was introduced in claims 4, 5, 8, 9 and 10 to replace the term "nits-defibrator". These replacement terms are not regarded as to be equivalent to the original terms. No basis for such amendments can be found in the application as filed and therefore, these amendments are considered to introduce subject-matter that extends beyond the content of the application, as originally filed, contrary to the provisions of Article 34(2)b) PCT. As a consequence, these amendments were ignored in the establishment of the present examination report (Rule 70(2)c) PCT).

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: WO 8703626 A1  
D2: US-A-3 581 706

2. The present application does not meet the requirements of the PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT. Indeed document D1, which is considered to represent the most relevant state of the art, discloses (cf. Figure 2) a plant suitable for producing a nonwoven web of fibres, comprising: a defibrator (21), a forming head (1), which forms a fibre web on an endless forming wire (27) mainly running horizontally, a transport fan (25) for transporting defibrated fibre to said forming head (1) via an air duct (24), whereby nits are extracted from said forming head via a second air duct ((28)+(29)) and wherein the plant also includes a separator (23) connected to said second air duct, suitable for separating nits from fibres (cf. p. 4, l. 5-32). Therefore, the subject-matter of claim 1 differs from the plant of D1 only in that a second transport fan is present, in order to extract nits from the forming head.

In D1, this extraction is carried out by means of the same fan (25), which is adopted for transporting defibrated fibre to the forming head (cf. Figure 2). No particular technical effect can be seen, which derives from the use of two fans. Actually, the same effect, as in the present application, is obtained in D1 by using only one fan.

As a consequence, no inventive step can be acknowledged with respect to D1, as far as the subject-matter of independent claim 1 is concerned.

3. Dependent claims 2-10 do not appear to contain any additional feature which, in combination with the features of any claim to which they refer, meets the requirements of the PCT with respect to inventive step (Article 33(3) PCT). Indeed, all mentioned features are either known from D1 (cf. Figures 2 and 3 and p. 4, l. 5-p. 5, l. 7) or regarded as obvious design possibilities for a person skilled in the art. In particular, the presence of a nits defibrator, introduced in claim 4, is disclosed also in document D2 (cf. c. 3, l. 21-c. 4, l. 1).
4. The industrial applicability of the subject-matter of all claims is beyond any doubt (Articles 33(4) PCT).

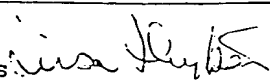
**Re Item VIII**

**Certain observations on the international application**

1. Independent claim 1 is reported in the description by adopting a different wording (see p. 1, l. 3-9). In particular, it is omitted that a forming head is present for forming a fibre web, and the separator is not mentioned. This makes the present application unclear with respect to the subject-matter for which protection is sought (Article 6 PCT).
2. Dependent claim 3 defines a "fourth" fan, whereas only two fans are introduced in claim 1 to which claim 3 refers. Claim 10 should refer only to claims 4 and 5, where the nits defibrator was mentioned (Article 6 PCT).

# INTERNATIONAL SEARCH REPORT

International Application No PCT/SE86/00521

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) *		
According to International Patent Classification (IPC) or to both National Classification and IPC 4		
D 04 H 1/72, D 21 H 5/26, B 27 N 3/00		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched 7		
Classification System	Classification Symbols	
IPC 4 US C1	D 04 H 1/70-/74, 1/40, 1/00-/04; D 21 H 5/26; B 27 N 3/00-/04 19: 296-308, 161.1, 155-156.4, 144-149, 105; 28: 116-139; 65: 4.4, 9; 425: 80-83.4	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched 8		
SE, NO, DK, FI classes as above		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT 9</b>		
Category *	Citation of Document, 11 with indication, where appropriate, of the relevant passages 12	Relevant to Claim No. 13
A	DE, A, 1 802 161 (DOMTAR LTD) 19 June 1969	
A	Derwent's abstract No. B5 085211/14, SU 1 110 845	
A	EP, A1, 0 040 693 (RHEINHOLD & MAHLA GMBH) 2 December 1981	
<p>* Special categories of cited documents: 10</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search		Date of Mailing of this International Search Report
1987-02-17		1987-02-23
International Searching Authority		Signature of Authorized Officer
Swedish Patent Office		Liisa Hyrkäs 

PCT REQUEST

19803003PCT

Original (for SUBMISSION) - printed on 13.07.1999 10.22.46 AM

0 0-1	For receiving Office use only International Application No.	PCT/DK 99/00401
0-2	International Filing Date	13 JULY 1999
0-3	Name of receiving Office and "PCT International Application"	Patentdirektoratet Danish Patent Office PCT-International Application
0-4 0-4-1	Form - PCT/RO/101 PCT Request Prepared using	PCT-EASY Version 2.84 (updated 01.06.1999)
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	Danish Patent Office (RO/DK)
0-7	Applicant's or agent's file reference	19803003PCT
I	Title of invention	NITS SEPARATOR
II	Applicant	applicant only
II-1	This person is:	all designated States except US
II-2	Applicant for	M&J FIBRETECH A/S
II-4	Name	Vejlevej 3
II-5	Address:	DK-8700 Horsens Denmark
II-6	State of nationality	DK
II-7	State of residence	DK
II-8	Telephone No.	no
II-9	Facsimile No.	no
II-10	e-mail	no
III-1	Applicant and/or inventor	applicant and inventor
III-1-1	This person is:	US only
III-1-2	Applicant for	SØRENSEN, Elmgaard, Birger
III-1-4	Name (LAST, First)	Viemosevej 3
III-1-5	Address:	DK-7120 Vejle Ø Denmark
III-1-6	State of nationality	DK
III-1-7	State of residence	DK

## PCT REQUEST

19803003PCT


Original (for SUBMISSION) - printed on 13.07.1999 10.22.46 AM

IV-1	<b>Agent or common representative; or address for correspondence</b>	<p><b>agent</b></p> <p><b>HOLME PATENT A/S</b>  <b>Vesterbrogade 20</b>  <b>DK-1620 Copenhagen V</b>  <b>Denmark</b>  <b>+45 3324 2121</b>  <b>+45 3324 9121</b>  <b>Holme@HolmePatent.dk</b></p>
	The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	
IV-1-1	Name	
IV-1-2	Address:	
IV-1-3	Telephone No.	
IV-1-4	Facsimile No.	
IV-1-5	e-mail	
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p><b>AP: GH GM KE LS MW SD SZ UG ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT</b></p> <p><b>EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT</b></p> <p><b>EP: AT BE CH&amp;LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT</b></p> <p><b>OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT</b></p>
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p><b>AE AL AM AT AU AZ BA BB BG BR BY CA</b>  <b>CH&amp;LI CN CU CZ DE DK EE ES FI GB GD GE</b>  <b>GH GM HR HU ID IL IN IS JP KE KG KP KR</b>  <b>KZ LC LK LR LS LT LU LV MD MG MK MN MW</b>  <b>MX NO NZ PL PT RO RU SD SE SG SI SK SL</b>  <b>TJ TM TR TT UA UG US UZ VN YU ZA ZW</b></p>
V-5	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	

## PCT REQUEST

19803003PCT

Original (for SUBMISSION) - printed on 13.07.1999 10.22.46 AM

V-6	Exclusion(s) from precautionary designations	NONE	
VI-1	Priority claim of earlier national application		
VI-1-1	Filing date	14 July 1998 (14.07.1998)	
VI-1-2	Number	PA 1998 00933	
VI-1-3	Country	DK	
VI-2	Priority document request The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1	
VII-1	International Searching Authority Chosen	Swedish Patent Office (ISA/SE)	
VII-2	Request to use results of earlier search; reference to that search		
VII-2-1	Date	17 February 1999 (17.02.1999)	
VII-2-2	Number	DK 98/00123	
VII-2-3	Country (or regional Office)	SE	
VIII	Check list	number of sheets	electronic file(s) attached
VIII-1	Request	4	-
VIII-2	Description	8	-
VIII-3	Claims	2	-
VIII-4	Abstract	1	19803003pct_abstract.txt
VIII-5	Drawings	1	-
VIII-7	TOTAL	16	
	Accompanying items	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-17	Other (specified):	Copy of ITS	-
VIII-18	Figure of the drawings which should accompany the abstract	1	
VIII-19	Language of filing of the international application	Danish	
IX-1	Signature of applicant or agent		
IX-1-1	Name	HOLME PATENT A/S	
IX-1-2	Name of signatory	Edvard Holme	

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	RO/DK 13 JUL 1999 (13.07.1999)
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	

## PCT REQUEST

19803003PCT

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10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
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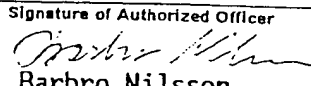
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# INTERNATIONAL SEARCH REPORT

International Application No PCT/SE 90/00621

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>6</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC5: D 21 H 27/00		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
IPC5	B 27 N; D 04 H; D 21 B; D 21 F; D 21 H	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in Fields Searched <sup>8</sup>		
SE,DK,FI,NO classes as above		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>		
Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
A	GB, A, 892295 (T.M.M. (RESEARCH) LIMITED) 28 March 1962, see figure 2; claim 1 --	1-14
A	EP, A1, 0032044 (KIMBERLY-CLARK CORPORATION) 15 July 1981, see page 20 - page 21; figures 1,3,11 --	1-14
A	EP, A2, 0093585 (CHICOPEE) 9 November 1983, see figures 1,2; claims 1-4 --	1-14
A	EP, A2, 0190634 (KIMBERLY-CLARK CORPORATION) 13 August 1986, see figure 1; claims 1-29 --	1-14
<p><sup>10</sup> Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search		Date of Mailing of this International Search Report
14th December 1990		1990 -12- 2 0
International Searching Authority		Signature of Authorized Officer
SWEDISH PATENT OFFICE		 Barbro Nilsson

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category	Citation of Document, with indication, where appropriate, of the relevant passages	Relevant to Claim No
A	EP, A1, 0224892 (FLÄKT AKTIEBOLAG) 10 June 1987, see abstract; figure 1 --	1-14
A	US, A, 4701294 (RADWANSKI ET AL) 20 October 1987, see abstract; figure 1 -- -----	1-14

**ANNEX TO THE INTERNATIONAL SEARCH REPORT  
ON INTERNATIONAL PATENT APPLICATION NO.PCT/SE 90/00621**

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the Swedish Patent Office EDP file on **90-11-01**. The Swedish Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB-A- 892295	62-03-28	NONE	
EP-A1- 0032044	81-07-15	AU-B- 537637	84-07-05
		AU-D- 6558280	81-06-25
		CA-A- 1156813	83-11-15
		JP-A- 56101962	81-08-14
		US-A- 4375447	83-03-01
		CA-A- 1149572	83-07-12
		US-A- 4366111	82-12-28
		CA-A- 1156814	83-11-15
		US-A- 4375448	83-03-01
EP-A2- 0093585	83-11-09	AU-B- 557362	86-12-18
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		SE-B-C- 457729	89-01-23
		SE-A- 8505726	87-06-05
		US-A- 4712277	87-12-15
US-A- 4701294	87-10-20	NONE	

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